

# SEQUENCE LISTING

<110> Friddle, Carl Johan  
Hilbun, Erin  
Wilganowski, Nathaniel L.

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<151> 2001-03-12

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Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly Asp Gly Ser Ala Leu  
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Ala Val Glu His Asn Asn Leu Gly Lys Ala Val Tyr Ser Arg Val Ala  
245 250 255  
Arg Ile Cys Lys Asn Asp Met Gly Gly Ser Gln Arg Val Leu Glu Lys  
260 265 270  
His Trp Thr Ser Phe Leu Lys Ala Arg Leu Asn Cys Ser Val Pro Gly  
275 280 285  
Asp Ser Phe Phe Tyr Phe Asp Val Leu Gln Ser Ile Thr Asp Ile Ile  
290 295 300  
Gln Ile Asn Gly Ile Pro Thr Val Val Gly Val Phe Thr Thr Gln Leu  
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325 330 335  
Glu Lys Val Phe Lys Gly Arg Phe Lys Glu Gln Lys Thr Pro Asp Ser  
340 345 350  
Val Trp Thr Ala Val Pro Glu Asp Lys Val Pro Lys Pro Arg Pro Gly  
355 360 365  
Cys Cys Ala Lys His Gly Leu Ala Glu Ala Tyr Lys Thr Ser Ile Asp  
370 375 380  
Phe Pro Asp Glu Thr Leu Ser Phe Ile Lys Ser His Pro Leu Met Asp  
385 390 395 400  
Ser Ala Val Pro Pro Ile Ala Asp Glu Pro Trp Phe Thr Lys Thr Arg  
405 410 415  
Val Arg Tyr Arg Leu Thr Ala Ile Ser Val Asp His Ser Ala Gly Pro

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420 425 430  
 Tyr Gln Asn Tyr Thr Val Ile Phe Val Gly Ser Glu Ala Gly Met Val  
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 <213> homo sapiens

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<210> 8
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<212> PRT
<213> homo sapiens

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35 40 45
Met Leu Lys Ile Arg Asp Thr Leu Tyr Ile Ala Gly Arg Asp Gln Val
50 55 60
Tyr Thr Val Asn Leu Asn Glu Met Pro Lys Thr Glu Val Ile Pro Asn
65 70 75 80
Lys Lys Leu Thr Trp Arg Ser Arg Gln Gln Asp Arg Glu Asn Cys Ala
85 90 95
Met Lys Gly Lys His Lys Asp Glu Cys His Asn Phe Ile Lys Val Phe
100 105 110
Val Pro Arg Asn Asp Glu Met Val Phe Val Cys Gly Thr Asn Ala Phe
115 120 125
Asn Pro Met Cys Arg Tyr Tyr Arg Leu Ser Thr Leu Glu Tyr Asp Gly
130 135 140
Glu Glu Ile Ser Gly Leu Ala Arg Cys Pro Phe Asp Ala Arg Gln Thr
145 150 155 160
Asn Val Ala Leu Phe Ala Asp Gly Lys Leu Tyr Ser Ala Thr Val Ala
165 170 175
Asp Phe Leu Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly Asp Gly
180 185 190
Ser Ala Leu Arg Thr Ile Lys Tyr Asp Ser Lys Trp Ile Lys Glu Pro
195 200 205
His Phe Leu His Ala Ile Glu Tyr Gly Asn Tyr Val Tyr Phe Phe Phe
210 215 220
Arg Glu Ile Ala Val Glu His Asn Asn Leu Gly Lys Ala Val Tyr Ser
225 230 235 240
Arg Val Ala Arg Ile Cys Lys Asn Asp Met Gly Gly Ser Gln Arg Val
245 250 255
Leu Glu Lys His Trp Thr Ser Phe Leu Lys Ala Arg Leu Asn Cys Ser
260 265 270
Val Pro Gly Asp Ser Phe Phe Tyr Phe Asp Val Leu Gln Ser Ile Thr
275 280 285

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Asp Ile Ile Gln Ile Asn Gly Ile Pro Thr Val Val Gly Val Phe Thr
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Asp Asp Ile Glu Lys Val Phe Lys Gly Arg Phe Lys Glu Gln Lys Thr
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Pro Asp Ser Val Trp Thr Ala Val Pro Glu Asp Lys Val Pro Lys Pro
340                345                350
Arg Pro Gly Cys Cys Ala Lys His Gly Leu Ala Glu Ala Tyr Lys Thr
355                360                365
Ser Ile Asp Phe Pro Asp Glu Thr Leu Ser Phe Ile Lys Ser His Pro
370                375                380
Leu Met Asp Ser Ala Val Pro Pro Ile Ala Asp Glu Pro Trp Phe Thr
385                390                395                400
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405                410                415
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420                425                430
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435                440                445
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465                470                475                480
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485                490                495
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500                505                510
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515                520                525
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Glu Phe Gly Asn Thr Ala His Leu Gly Asp Cys His Glu Ile Leu Pro
545                550                555                560
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565                570                575
Met Glu Val Ser Ser Ser Ser Val Thr Thr Met Ala Ser Ile Pro Glu
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Ile Thr Pro Lys Val Ile Asp Thr Trp Arg Pro Lys Leu Thr Ser Ser
595                600                605
Arg Lys Phe Val Val Gln Asp Asp Pro Asn Thr Ser Asp Phe Thr Asp
610                615                620
Pro Leu Ser Gly Ile Pro Lys Gly Val Arg Trp Glu Val Gln Ser Gly
625                630                635                640
Glu Ser Asn Gln Met Val His Met Asn Val Leu Ile Thr Cys Val Phe
645                650                655
Ala Ala Phe Val Leu Gly Ala Phe Ile Ala Gly Val Ala Val Tyr Cys
660                665                670
Tyr Arg Asp Met Phe Val Arg Lys Asn Arg Lys Ile His Lys Asp Ala
675                680                685
Glu Ser Ala Gln Ser Cys Thr Asp Ser Ser Gly Ser Phe Ala Lys Leu
690                695                700
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Ser Pro Lys Leu Tyr Ser Asn Leu Leu Thr Ser Arg Lys Glu Leu Pro
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Pro Asn Gly Asp Thr Lys Ser Met Val Met Asp His Arg Gly Gln Pro  
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Pro Glu Leu Ala Ala Leu Pro Thr Pro Glu Ser Thr Pro Val Leu His  
755 760 765  
Gln Lys Thr Leu Gln Ala Met Lys Ser His Ser Glu Lys Ala His Gly  
770 775 780  
His Gly Ala Ser Arg Lys Glu Thr Pro Gln Phe Phe Pro Ser Ser Pro  
785 790 795 800  
Pro Pro His Ser Pro Leu Ser His Gly His Ile Pro Ser Ala Ile Val  
805 810 815  
Leu Pro Asn Ala Thr His Asp Tyr Asn Thr Ser Phe Ser Asn Ser Asn  
820 825 830  
Ala His Lys Ala Glu Lys Lys Leu Gln Asn Ile Asp His Pro Leu Thr  
835 840 845  
Lys Ser Ser Ser Lys Arg Asp His Arg Arg Ser Val Asp Ser Arg Asn  
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Thr Leu Asn Asp Leu Leu Lys His Leu Asn Asp Pro Asn Ser Asn Pro  
865 870 875 880  
Lys Ala Ile Met Gly Asp Ile Gln Met Ala His Gln Asn Leu Met Leu  
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Asp Pro Met Gly Ser Met Ser Glu Val Pro Pro Lys Val Pro Asn Arg  
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Glu Ala Ser Leu Tyr Ser Pro Pro Ser Thr Leu Pro Arg Asn Ser Pro  
915 920 925  
Thr Lys Arg Val Asp Val Pro Thr Thr Pro Gly Val Pro Met Thr Ser  
930 935 940  
Leu Glu Arg Gln Arg Gly Tyr His Lys Asn Ser Ser Gln Arg His Ser  
945 950 955 960  
Ile Ser Ala Met Pro Lys Asn Leu Asn Ser Pro Asn Gly Val Leu Leu  
965 970 975  
Ser Arg Gln Pro Ser Met Asn Arg Gly Gly Tyr Met Pro Thr Pro Thr  
980 985 990  
Gly Ala Lys Val Asp Tyr Ile Gln Gly Thr Pro Val Ser Val His Leu  
995 1000 1005  
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<212> PRT
<213> homo sapiens

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Gly Arg Pro Ser Gly Asn Glu Ser Gln His Arg Leu Asp Phe Gln Leu

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35	40	45
Met Leu Lys Ile Arg Asp Thr	Leu Tyr Ile Ala Gly Arg Asp Gln Val	
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Tyr Thr Val Asn Leu Asn Glu Met Pro Lys Thr Glu Val Ile Pro Asn		
65	70	75
Lys Lys Leu Thr Trp Arg Ser Arg Gln Gln Asp Arg Glu Asn Cys Ala		
85	90	95
Met Lys Gly Lys His Lys Asp Glu Cys His Asn Phe Ile Lys Val Phe		
100	105	110
Val Pro Arg Asn Asp Glu Met Val Phe Val Cys Gly Thr Asn Ala Phe		
115	120	125
Asn Pro Met Cys Arg Tyr Tyr Arg Leu Ser Thr Leu Glu Tyr Asp Gly		
130	135	140
Glu Glu Ile Ser Gly Leu Ala Arg Cys Pro Phe Asp Ala Arg Gln Thr		
145	150	155
Asn Val Ala Leu Phe Ala Asp Gly Lys Leu Tyr Ser Ala Thr Val Ala		
165	170	175
Asp Phe Leu Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly Asp Gly		
180	185	190
Ser Ala Leu Arg Thr Ile Lys Tyr Asp Ser Lys Trp Ile Lys Glu Pro		
195	200	205
His Phe Leu His Ala Ile Glu Tyr Gly Asn Tyr Val Tyr Phe Phe Phe		
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225	230	235
Arg Val Ala Arg Ile Cys Lys Asn Asp Met Gly Gly Ser Gln Arg Val		
245	250	255
Leu Glu Lys His Trp Thr Ser Phe Leu Lys Ala Arg Leu Asn Cys Ser		
260	265	270
Val Pro Gly Asp Ser Phe Phe Tyr Phe Asp Val Leu Gln Ser Ile Thr		
275	280	285
Asp Ile Ile Gln Ile Asn Gly Ile Pro Thr Val Val Gly Val Phe Thr		
290	295	300
Thr Gln Leu Asn Ser Ile Pro Gly Ser Ala Val Cys Ala Phe Ser Met		
305	310	315
Asp Asp Ile Glu Lys Val Phe Lys Gly Arg Phe Lys Glu Gln Lys Thr		
325	330	335
Pro Asp Ser Val Trp Thr Ala Val Pro Glu Asp Lys Val Pro Lys Pro		
340	345	350
Arg Pro Gly Cys Cys Ala Lys His Gly Leu Ala Glu Ala Tyr Lys Thr		
355	360	365
Ser Ile Asp Phe Pro Asp Glu Thr Leu Ser Phe Ile Lys Ser His Pro		
370	375	380
Leu Met Asp Ser Ala Val Pro Pro Ile Ala Asp Glu Pro Trp Phe Thr		
385	390	395
Lys Thr Arg Val Arg Tyr Arg Leu Thr Ala Ile Ser Val Asp His Ser		
405	410	415
Ala Gly Pro Tyr Gln Asn Tyr Thr Val Ile Phe Val Gly Ser Glu Ala		
420	425	430
Gly Met Val Leu Lys Val Leu Ala Lys Thr Ser Pro Phe Ser Leu Asn		
435	440	445
Asp Ser Val Leu Leu Glu Glu Ile Glu Ala Tyr Asn His Ala Lys Cys		
450	455	460
Ser Ala Glu Asn Glu Glu Asp Lys Lys Val Ile Ser Leu Gln Leu Asp		
465	470	475
Lys Asp His His Ala Leu Tyr Val Ala Phe Ser Ser Cys Ile Ile Arg		
480		

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 Val Arg Pro Leu Asn Lys Tyr Thr Tyr  
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